

more abundant than the ♂, is yet comparatively rare. It is of a buff or salmon color, with eleven segments, pink on their posterior margins, and overlapping. Head narrow, with projecting muzzle, but imperfect organs of manducation. Eyes small, round, black, on sides of the head. Antennae shorter than thorax, approximate, situated in front of the eye, pale yellow, feebly pectinate. Thorax with margin reflexed, subrugose. Adjoining the shield are the rudimentary elytra, semicircular and very small. Feet feeble, compressed; the body is disproportionately large, and

the insect consequently moves with sudden nervous action, and pauses every few steps.

Though there are no special phosphorescent vesicles visible through the membrane, yet it emits light from the entire ventral surface of the three posterior segments. This is very brilliant, and when less intense posteriorly, appears diffused over the body. This brilliancy continues until oviposition. This ♀ insect is similar to Packard's illustration 428, of an apterous ♀ from Madagascar, plus the aborted elytra and pectinate antennae.

NOTE ON NORTH AMERICAN *TRYPETIDAE*.

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Among a number of diptera, collected by Mr. J. Boll in Dallas, Texas, and purchased by me in Geneva a short time ago, there were 25 ♂ and ♀ specimens of a *Trypeta*, bearing on a label "bred from galls on *Ambrosia*." The insect could be easily identified with *T. gibba* Loew, and as the habits of this species were hitherto unknown, I deem it worth the while to put Mr. Boll's observation on record.

The gall, which is likewise in the collection, is an oblong swelling of the stem, probably terminal.

The habits of the following North American *Trypeta* have been hitherto investigated and published (the name of the discoverer is in parentheses): —

- Rhagoletis pomonella*. — Fruit of the apple-tree (Walsh).
Oedaspis polita. — Gall on *Solidago* (O. S.).
 " *gibba*. — Gall on *Ambrosia* (Boll).
Eurosta solidaginis. — Gall on *Solidago* (Harris).
Eutreta diana. — Gall on *Artemisia tridentata* (Riley).
Aspilota alba. — Seeds of *Vernonia* (Riley).

This is a very small number, in comparison to that of the described N. A. *Trypeta*; but the most striking circumstance in connection with it is that among six *Trypeta*, whose habits are known, not less than *four* should occur in galls, and only *one* in the heads of a composite flower. In Europe the *Trypeta* bred from galls form an imperceptible minority, and most of the species are obtained from the heads of composites. Compare, for instance, the list of 60 species bred by Frauenfeld (Verh. k.-k. zool.-bot. Gesell. Wien, 1863, p. 221-224), among which only *three* formed galls on the stem of the plant.

It would be worth while for American entomologists to collect dry heads of composite plants in autumn, for the purpose of breeding *Trypeta*; a large number of new species of these pretty flies would probably be obtained.

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